DECON ENVIRONMENTAL SERVICES, INC.

23490 Connecticut Street
Hayward, California 94545
510.773-9137~510-782-8584 Fax
Jason Gulbransen
Project Manager

April 13, 2005

Mr. Todd Miller
Malcolm Pirnie, Inc.
2000 Powell Street, Suite 1180
Emeryville, CA 94608

**RE: System Operation Status Report**
**1st Quarter January, February, March 2005**
**Jefferson Car Wash Site**
**Groundwater Extraction and Treatment System**
**3080 Jefferson Street, Napa, California**

Dear Mr. Miller;

DECON Environmental Services, Inc. (DECON) has prepared this Status Report to document the quarterly activities at the above referenced site. The Jefferson Car Wash groundwater extraction and treatment system operates by pumping groundwater from two-extraction wells (EW-2, EW-3). The water is conveyed to the treatment compound where the water extracted from each well combines into one pipe and flows through a 10 micron bag filter. The raw water then flows through two granular activated carbon (GAC) units. The treated water then proceeds through a flow totalizer/meter and is discharged into the Napa Sanitary sewer system. The treatment system contains a piping manifold that allows the three carbon units to be utilized in any lead-lag configuration. Currently GAC vessel #1 is the lead and GAC vessel #2 is the lag. No change to the configuration occurred this quarter.

The purpose of this treatment system is to remove TPH-gasoline and MTBE contaminants from the groundwater. Monthly groundwater sample analyses indicate the system is meeting its intended purpose. The monthly sample analysis indicates the presence of TPH-gasoline and MTBE in the raw water from each extraction well. Analytical results from the treated effluent are consistently non-detect for these compounds.

The attached table summarizes the analytical results for each month at each sample location. There are five sample locations: (1) EW-2, (2) EW-3, (3) Combined Influent, (4) Lag GAC Vessel Inlet, (5) Effluent/Discharge point.

**January 2005 Site Visit**

The groundwater sampled from each well was clear and sediment free. The pressure gauges before and after the bag filter were the same (<1psi), indicating no sediment loading on the filter. The flow rates at each wellhead were appropriate, EW-2 ~3.5 gpm, EW-3 ~5 gpm.

The approximate contaminant mass removed is as follows:
10.10 grams of TPH-gasoline was removed from 318,280 gallons of treated water.
14.80 grams of MTBE was removed from 318,280 gallons of treated water.

**February 2005 Site Visit**

The groundwater sampled from each well was clear and sediment free. Due to recent heavy rain the bag filter contained sediment causing the higher pressures on the piping system inlet. The bag filter was changed after sampling the system. The system piping pressure returned to normal (<1 psi). The flow rates at each wellhead were appropriate, EW-2 ~3.5 gpm, EW-3 ~5 gpm.

The approximate contaminant mass removed is as follows:
19.04 grams of TPH-gasoline was removed from 248,208 gallons of treated water.
10.07 grams of MTBE was removed from 248,208 gallons of treated water.

**March 2005 Site Visit**

The groundwater sampled from each well was clear and sediment free. The pressure gauges before and after the bag filter were the same (<1psi), indicating no sediment loading on the filter. The flow rates at each wellhead were appropriate, EW-2 ~3.5 gpm, EW-3 ~5 gpm.

February 2005 water sample results indicated 4.7 ug/L of total VOCs at the lag vessel inlet. In accordance with the System O&M Plan the spent carbon in the lead vessel, GAC vessel #1, was changed out during this site visit after sampling. The lag vessel, GAC vessel #2, was configured as the new lead vessel, and GAC vessel #3 as the new lag vessel.

The approximate contaminant mass removed is as follows:
0.0 grams of TPH-gasoline was removed from 380,293 gallons of treated water.
14.58 grams of MTBE was removed from 380,293 gallons of treated water.

## System Observations/Recommendations

DECON responded to a high-pressure alarm notice on March 20th, 2005. Heavy rains had loaded the bag filter with sediment, and it was determined that waiting until the scheduled sampling event would be detrimental to the operation performance of the system. The bag filter was changed and system operating pressures returned to normal.

The carbon in GAC vessel #1 was changed out on April 11th, 2005. The vessel configuration was also changed to make GAC #2 the lead and GAC #3 the lag. The system was sampled prior to carbon change-out and re-configuration.

The roto-meters in EW-2 and EW-3 were cleaned on March 3rd, 2005. There was significant algae build up in each roto-meter.

A total of 946,781 gallons of groundwater were treated during the 1st quarter of 2005. A total of 29.14 grams of TPH-gas was removed, and a total of 39.45 grams of MTBE was removed for this quarter.

Please feel free to contact me with any questions regarding this project.

Sincerely,
DECON Environmental Services, Inc.

*Jason Gulbransen*

Jason Gulbransen
Project Manager

**First Quarter January, February, March 2005**
**Summary of Analytical Results**
**Jefferson Car Wash**
**Groundwater Treatment System**

| Jan-05 Sample Date 02-04-05 | | EW-2 | EW-3 | Combined Inlet | Lag V Inlet | Discharge |
|---|---|---|---|---|---|---|
| TPH-g | ug/l | 32 | <25 | 28 | <25 | <25 |
| BTEX | ug/l | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| MTBE | ug/l | 28 | 6.7 | 19 | 3.4 | <1 |
| TPH-d | ug/l | N/A | N/A | N/A | N/A | <50 |
| Total Lead | mg/l | N/A | N/A | N/A | N/A | <0.05 |
| Total Flow | gallons | 427,670 | 1,905,220 | N/A | N/A | 2,129,900 * |

**N/A: Not Analyzed or Not Applicable**

| Feb-05 Sample Date 03-03-05 | | EW-2 | EW-3 | Combined Inlet | Lag V Inlet | Discharge |
|---|---|---|---|---|---|---|
| TPH-g | ug/l | <25 | 27 | 29 | <25 | <25 |
| BTEX | ug/l | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| MTBE | ug/l | 24 | 6.3 | 15 | 4.7 | <1 |
| TPH-d | ug/l | N/A | N/A | N/A | N/A | <50 |
| Total Lead | mg/l | N/A | N/A | N/A | N/A | <0.05 |
| Total Flow | gallons | 489,588 | 2,091,510 | N/A | N/A | 2,345,140 * |

**N/A: Not Analyzed or Not Applicable**

| Mar-05 Sample Date 04-11-05 | | EW-2 | EW-3 | Combined Inlet | Lag V Inlet | Discharge |
|---|---|---|---|---|---|---|
| TPH-g | ug/l | <25 | <25 | <25 | <25 | <25 |
| BTEX | ug/l | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| MTBE | ug/l | 21 | 6.2 | 6.6 | 6.2 | <1 |
| TPH-d | ug/l | N/A | N/A | N/A | N/A | <50 |
| Total Lead | mg/l | N/A | N/A | N/A | N/A | <0.05 |
| Total Flow | gallons | 590,662 | 2,370,729 | N/A | N/A | 2,671,238 * |

**N/A Not Analyzed or Not Applicable**

*** These Flow Totals Are From The Discharge Flow Totalizer**

## Jefferson Carwash Mass Contaminant Removal Spreadsheet 1st Qtr 2005

| Jan-05 | | EW-2 | EW-3 | Combined Inlet | Lag V Inlet | Discharge | Total Mass |
|---|---|---|---|---|---|---|---|
| TPH-g | ug/l | 32 | 0 | 28 | <25 | <25 | |
| MTBE | ug/l | 28 | 6.7 | 19 | 3.4 | <1.0 | |
| Total Flow | gallons | 83,420 | 234,860 | N/A | N/A | 318,280 * | |
| | liters (3.78533) | 315,772 | 889,023 | | | 1,204,795 | |
| **Mass** | | | | | | | |
| TPH-g | grams | 10.10 | 0.00 | | | | **10.10** |
| MTBE | grams | 8.84 | 5.96 | | | | **14.80** |

| Feb-05 | | EW-2 | EW-3 | Combined Inlet | Lag V Inlet | Discharge | Total Mass |
|---|---|---|---|---|---|---|---|
| TPH-g | ug/l | 0 | 27 | 29 | <25 | <25 | |
| MTBE | ug/l | 24 | 6.3 | 15 | 4.7 | < 1 | |
| Total Flow | gallons | 61,918 | 186,290 | N/A | N/A | 248,208 * | |
| | liters (3.78533) | 234,380 | 705,169 | | | 939,549 | |
| **Mass** | | | | | | | |
| TPH-g | grams | 0.00 | 19.04 | | | | **19.04** |
| MTBE | grams | 5.63 | 4.44 | | | | **10.07** |

| Mar-05 | | EW-2 | EW-3 | Combined Inlet | Lag V Inlet | Discharge | Total Mass |
|---|---|---|---|---|---|---|---|
| TPH-g | ug/l | 0 | 0 | 0 | <25 | <25 | |
| MTBE | ug/l | 21 | 6.2 | 6.6 | 6.2 | < 1 | |
| Total Flow | gallons | 101,074 | 279,219 | N/A | N/A | 380,293 * | |
| | liters (3.78533) | 382,598 | 1,056,936 | | | 1,439,535 | |
| **Mass** | | | | | | | |
| TPH-g | grams | 0.00 | 0.00 | | | | **0.00** |
| MTBE | grams | 8.03 | 6.55 | | | | **14.58** |

**Total TPH-g Mass Removed for 1st Quarter** **29.14 g**
**Total MTBE Mass Removed for 1st Quarter** **39.45 g**

*** Discharge Flow Total From EW-2 & EW-3 Readings**